

I. AMENDMENTS TO THE CLAIMS

Claim 1. (Canceled)

Claim 2. (Currently Amended) A substantially purified nucleic acid molecule of the *Arabidopsis thaliana* genome having the nucleic acid sequence of SEQ ID NO: 5272 and complement thereof ~~a nucleic acid sequence selected from the group consisting of SEQ ID NO: 138601 through SEQ ID NO: 195836 and complements thereof.~~

Claims 3 to 5. (Canceled)

Claim 6. (Original) The substantially purified nucleic acid molecule according to claim 2, wherein said nucleic acid molecule further comprises nucleic acid sequences comprising one or more of a promoter region, regulatory region or intron region or parts of said regions.

Claim 7. (Currently Amended) A substantially purified first nucleic acid molecule which is complementary to a second nucleic acid molecule of the *Arabidopsis thaliana* genome having the nucleic acid sequence of SEQ ID NO: 5272 and complement thereof ~~a nucleic acid sequence selected from the group consisting of SEQ ID NO: 138061 through SEQ ID NO: 195835 and complements thereof~~ wherein said first nucleic acid molecule and said second nucleic acid molecule hybridize to one another with sufficient stability to remain annealed to one another under at least low stringency conditions of washing with a salt solution having a concentration of about 2.0 X sodium chloride/sodium citrate (SSC) at 50°C.

Claim 8. (Original) The substantially purified first nucleic acid molecule according to claim 7, wherein said stringency conditions are at least 0.2 X SSC at 50°C.

Claims 9 to 11. (Canceled)

Claim 12. (Currently Amended) A substantially purified first nucleic acid molecule which is homologous to a second nucleic acid molecule having the nucleic acid sequence of SEQ ID NO: 5272 and complement thereof ~~a nucleic acid sequence selected from the group consisting of SEQ ID NO: 138061 through SEQ ID NO: 195836 and complements thereof~~, wherein at least 90% of the nucleic acid sequence of said substantially purified first nucleic acid molecule is identical to said second nucleic acid molecule.

Claim 13. (Original) The substantially purified first nucleic acid molecule according to claim 12, wherein said first nucleic acid sequence is 100% identical to a nucleic acid sequence of a *non-Arabidopsis thaliana* homologue.

Claim 14. (Original) The substantially purified first nucleic acid molecule according to claim 12, wherein at least 98% of the sequence of said substantially purified nucleic acid molecule is identical to said second nucleic acid molecule.

Claims 15 to 18. (Canceled)

Claim 19. (Currently Amended) A transformed cell or organism cell or plant having an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to
- (b) a structural nucleic acid molecule which is homologous or complementary to [[a]] the nucleic acid molecule according to claim 2, which is linked to
- (c) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 20. (Original) A transformed cell or organism according to claim 19 which is selected from the group consisting of a plant cell, plant, mammalian cell, mammal, fish cell, fish, bird cell, bird, bacterial cell and fungal cell and wherein said mRNA encodes a protein in said cell.

Claim 21. (Original) A transformed cell or organism according to claim 19, wherein said structural nucleic acid molecule is a transcribed nucleic acid molecule with a transcribed strand and a nontranscribed strand and the transcribed strand specifically hybridizes to an mRNA molecule.

Claims 22 and 23. (Canceled)

Claim 24. (Currently Amended) A transformed cell or organism having an exogenous nucleic acid molecule which comprises:

- (a) a promoter region which functions in said cell to cause the production of an mRNA molecule wherein said promoter nucleic acid molecule is selected from the group consisting of a promoter located within SEQ ID NO: 5272 or complement thereof ~~SEQ ID NO: 1 through SEQ ID NO: 81306 or complements thereof~~ upstream of a gene having ~~a nucleic acid sequence selected from the group consisting of SEQ ID NO: 138061 through SEQ ID NO: 195836~~; which is linked to
- (b) a structural nucleic acid molecule encoding a protein or peptide; which is linked to
- (c) a 3' non-translated nucleic acid sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

Claim 25. (Original) A transformed cell or organism according to claim 24 which is selected from the group consisting of a plant cell, plant, mammalian cell, mammal, fish cell, fish, bird cell, bird, bacterial cell and fungal cell and wherein said mRNA encodes a protein in said cell.

Claim 26. (Currently Amended) A transformed cell or organism having an exogenous nucleic acid molecule which comprises a structural nucleic acid sequence which expresses an mRNA which is complementary to and hybridizes to at least part of the nucleic acid sequence of SEQ ID NO: 5272 and homolog thereof ~~a nucleic acid molecule having a sequence selected from the group consisting of SEQ ID NO: 138061 through SEQ ID NO: 195836 and homologs thereof.~~

Claim 27. (Currently Amended) A substantially purified oligonucleotide nucleic acid molecule comprising between about 15 and about 100 nucleotides homologous or complementary to the nucleic acid sequence of SEQ ID NO: 5272 ~~a nucleotide sequence within any of SEQ ID NO: 138061 through SEQ ID NO: 195836.~~

Claim 28. (Currently Amended) ~~[[A]]~~ The oligonucleotide nucleic acid molecule according to claim 27 comprising in the range of 18 to 50 bases, wherein from 18 to 25 of said bases are identical or complementary to an 18-25 bp segment of sequences from a fragment of SEQ ID NO: 5272 ~~SEQ ID NO: 138061 through SEQ ID NO: 195836.~~

Claims 29 to 31. (Canceled)

Claim 32. (Currently Amended) A collection of at least 1000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 33. (Currently Amended) A collection of at least 2000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 34. (Currently Amended) A collection of at least 5000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 35. (Currently Amended) A collection of at least 10,000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 36. (Currently Amended) A collection of at least 15,000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 37. (Currently Amended) A collection of at least 20,000 non-identical oligonucleotides comprising the substantially purified oligonucleotide nucleic acid molecule according to claim 27.

Claim 38. (Original) A collection according to claim 32 wherein said oligonucleotides are situated in an array on a substrate.

Claims 39 to 59. (Canceled)